



## Invasive Species Fact Sheet—Feral Pigs

### Feral pigs on Santa Cruz Island

On Santa Cruz Island, feral pigs (*Sus scrofa*) are threatening the survival of the endangered Santa Cruz Island fox and nine native plant species. Feral pigs damage the environment by digging up the soil, feeding on native wildlife and vegetation, causing erosion, and spreading invasive weeds. Pig rooting is also destroying archaeological records of Native American inhabitation from the past 10,000 years.

Eradicating feral pigs is essential to the protection and restoration of natural and cultural resources on Santa Cruz Island, and to preserving biodiversity and ecosystem processes on the Channel Islands. Because Santa Cruz is an island, it presents a rare opportunity to protect these unique resources for present and future generations, by permanently freeing the island ecosystem from the destructive impacts of introduced feral pigs.

### History and current status

- Island ecosystems are highly vulnerable to invasions of non-native species such as pigs. Isolated island species typically have evolved fewer defenses against introduced predation, competition, habitat disruption, or disease. Feral pigs are especially disruptive because they reproduce quickly, feed on a wide variety of native animals and plants, and damage many habitats.
- Feral or domestic pigs are not native to the Channel Islands or to California. Domestic pigs were introduced to Santa Cruz Island in 1852. By 1857, pigs had escaped and become feral on the island.
- Pig populations on Santa Cruz Island are cyclical. Effects of drought are magnified on the island, where pigs cannot “migrate to greener pastures.” Consequently, pig populations on Santa Cruz experience dramatic boom and bust cycles, with drought years characterized by mass starvation and cannibalism. During the 1988-89 drought, up to 90% of pigs on the island died of starvation.
- In recent years, between 1,000 and 4,000 pigs have inhabited Santa Cruz Island, radically disturbing the balance of the island ecosystem.
- Feral pigs are a problem across California. An estimated 130,000 wild pigs inhabit 56 of 58 California counties, uprooting the landscape, spreading invasive weeds and consuming native plants and wildlife.

### The problem

#### *Decline of the Channel Island fox*

- Feral pigs cause extensive damage to Santa Cruz Island’s sensitive resources. The future of the island fox and nine threatened or endangered plants on Santa Cruz Island will not be secure until all of the feral pigs are eliminated.

- Feral pigs have played a pivotal role in the catastrophic decline of the island fox, attracting a new predator to the northern Channel Islands—golden eagles. Golden eagle predation has placed the island fox on the brink of extinction. Once only occasional visitors, golden eagles now nest on the island and hunt island foxes and pigs. From 1994-2000, the island fox population on Santa Cruz plummeted from 1,500 to fewer than 100 animals.

#### *Destruction of cultural resources*

- Pig rooting has disturbed almost all of the island's known archaeological sites, including prehistoric and historic burials. Santa Cruz contains an extensive archaeological record of the Chumash culture contained in some 3,000 sites with the earliest dating to nearly 10,000 years ago.

#### *Damage to native plant communities*

- A single pig can root up and cause extensive damage to a large area in a single night.
- Pigs have been identified as a threat to all nine of the threatened or endangered native plant species on the island. Pigs also significantly inhibit the regeneration of oak communities on the island by consuming acorns.
- Feral pigs on Santa Cruz Island dig up native plant cover, causing soil erosion and eliminating food and nesting sites for native wildlife.
- Pigs act as a major force spreading invasive, non-native weeds. Pig rooting creates an ideal seed bed for weeds.

#### **What is being done**

- Experts have determined that it is not feasible to control wild pig population. Pigs reproduce so quickly that control efforts are promptly nullified by new offspring. Eradication is the only way to stop the damage they cause to island resources.
- In the spring of 2005, The Nature Conservancy and the National Park Service will begin eliminating the feral pigs using a professional hunting organization. Santa Cruz Island has been divided into five fenced sections of approximately 12,000 acres each to allow a controlled elimination of pigs. The entire island will be monitored after the feral pigs are removed.
- Feral pigs on Santa Cruz Island have been exposed to infectious diseases such as hog cholera and pseudorabies, a disease that they still could carry. Federal and state agencies will not allow transport of live animals to the mainland because of the risk of spreading these diseases to mainland livestock.
- Feral pigs will not be salvaged for food because of the prohibitive cost and generally poor quality of the meat. The USDA has strict regulations regarding the source, handling, refrigeration, and distribution of food products to the public. Following these regulations would substantially increase the expense of the project and possibility of failure due to requiring more people and time. Traditionally, those choosing to harvest pigs for food would capture and fatten the pigs for several weeks to make the meat more edible.
- No contraceptive exists for control or eradication of wild pig populations on Santa Cruz Island. The reproductive ability of pigs is so great that only a small percentage of the population needs to breed to maintain the population.